

Pavilion Installation Guide

Read this guide and review shop drawings and notes before beginning installation.

All packages should be opened and inspected for hidden damage upon receipt. Any missing or damaged components should be noted on the delivery receipt with the carrier before accepting the shipment. All items should be repackaged and stored where protected from moisture, dirt, and excessive heat. Do not wrap material so that heat or moisture can become trapped. Ensure that items are level, fully supported, and have airflow between parts. Damage from improper storage is not considered shipping damage and is not covered by product warranties. Handle materials so as to protect materials, coatings, fabric and finishes during transportation and installation to prevent damage or staining.

It is the responsibility of the installer to meet or exceed all code and safety requirements, and to obtain all required building permits. These instructions are only a guide, and may not address every circumstance. The installer should determine and implement appropriate installation techniques for each situation. Structureworks shall not be held liable for improper or unsafe installations.

Recommended Tools

The tools required for installation will vary depending on structure configuration and the hardware used. Review shop drawings to confirm drill bit sizes, socket sizes, and other project specific tools.

- Pencil
- 4' Level
- 8' Ladder (2)
- Framing Square
- Drill
- Impact Driver w/ Phillips Bit
- Adjustable Wrench
- Tape Measure
- Socket Wrench w/ Sockets
- Hole-Cleaning Brush
- Rivet Tool
- Caulk Gun
- Compressed Air

Required Materials

Depending on the configuration of the structure, additional materials such as ledger attachment hardware, silicone caulk, and anchoring epoxy may be needed. Review shop drawings for project specific requirements.

Cleaning and Maintenance

Use a combination of Simple Green All-Purpose Cleaner and hot water with a soft bristle brush. Clean after installation and on an annual basis. For more difficult to clean marks, a Mr. Clean Magic Eraser can be used. Structural attachments should be inspected annually.

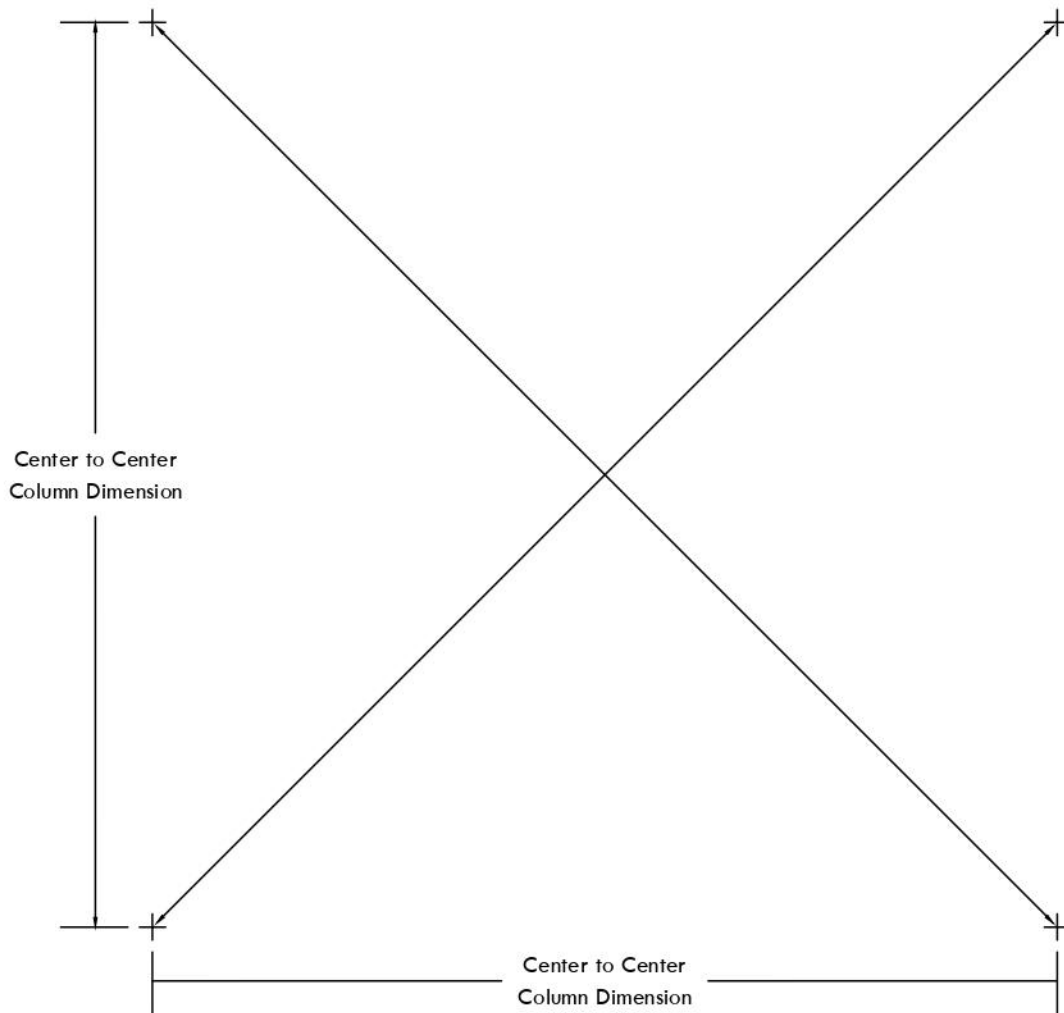
Installation Sequence

This installation guide provides a step by step sequence for the installation of the structure. This guide covers only the structure, separate installation guides are provided for accessories and other products used in the installation of the structure. Ensure that you have all required installation guides before beginning the installation.

All structures are made to order and are provided with shop drawings. Shop drawings may contain additional information, details, or job specific instructions. Shop drawings take precedence over this installation guide.

Layout

Layout all columns according to the shop drawings. Columns must be located precisely and variations in the height of the mounting surface must be accounted for by leveling each column. The structure will not install correctly if the columns are installed out of square or out of level from one another.



Prepare for Column Installation - Concrete Mounting Surfaces

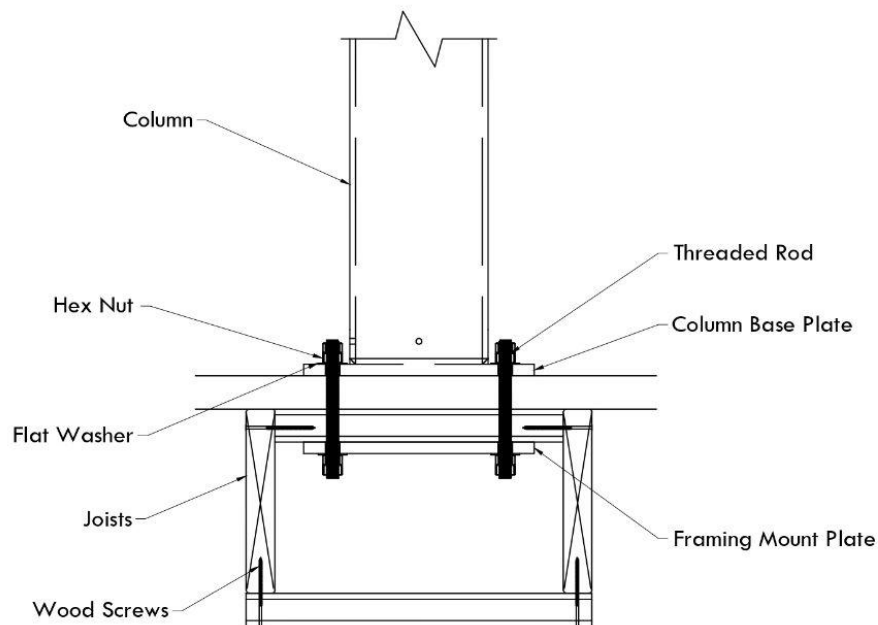
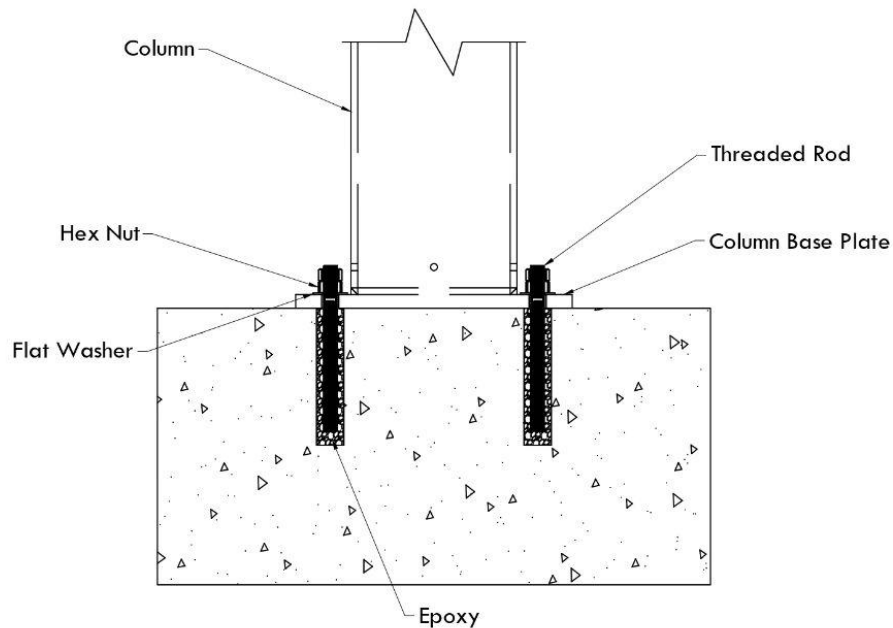
Drill the holes for the threaded rods and epoxy. The holes should be sized larger than the threaded rod diameter per the epoxy manufacturer's instructions. Clean the hole thoroughly.

Fill the holes with epoxy per the manufacturer's instructions. Insert the threaded rods in a twisting motion to ensure epoxy flows into the threads of the rods. Ensure that the rods are inserted to the proper depth and are plumb.

Prepare for Column Installation - Wood Mounting Surfaces

Install pressure treated wood blocking between the joists against the underside of the decking. Blocking should be a nominal thickness of 2" and wider than the framing mount plate.

Drill the holes for the threaded rods through the deck and wood blocking.

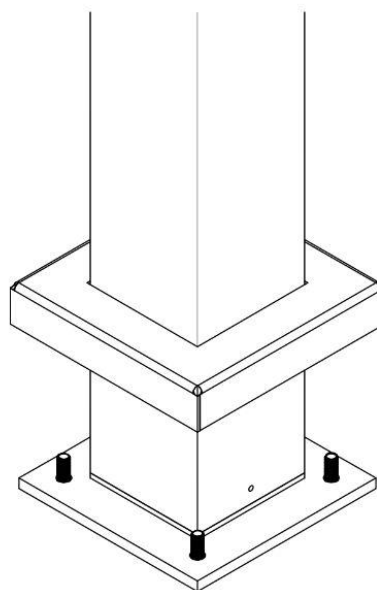
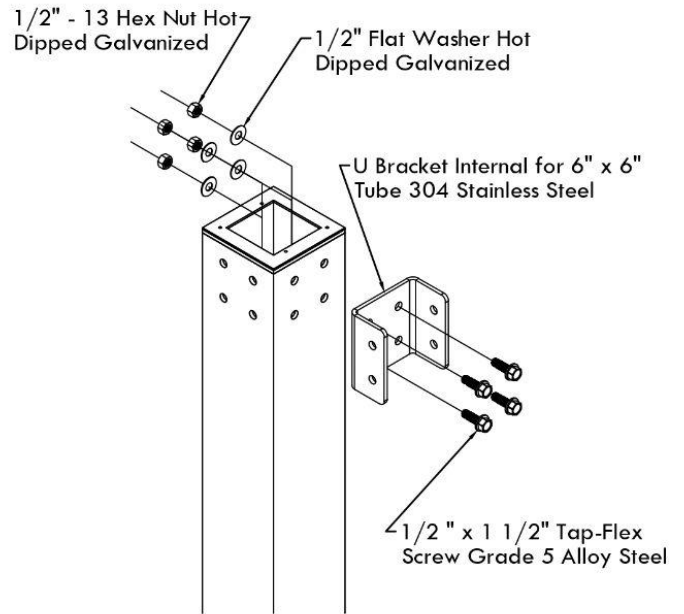
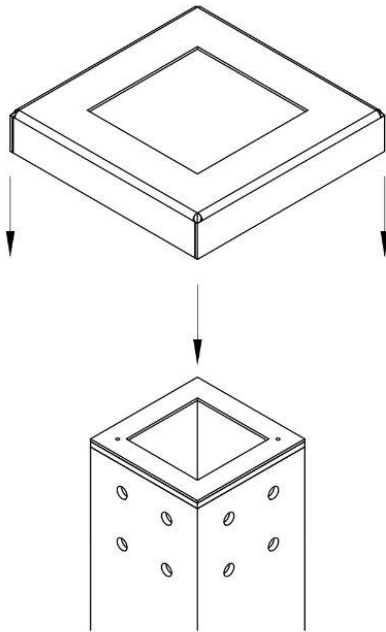


Install Columns

Place the base plate cover over the top of the column and lower it to the ground.

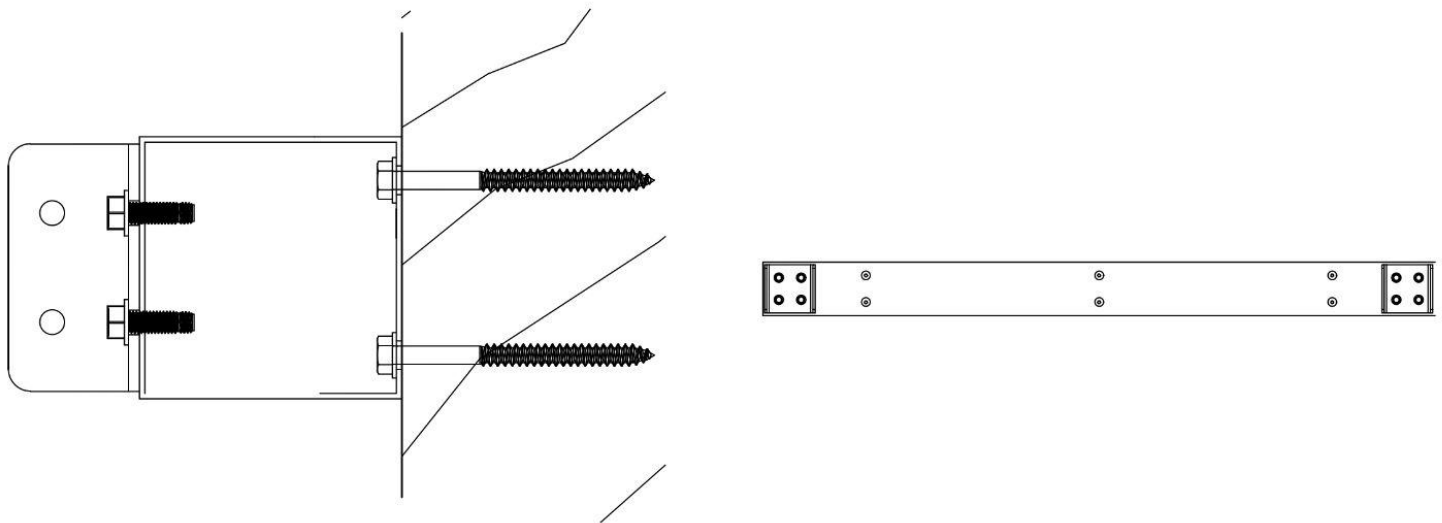
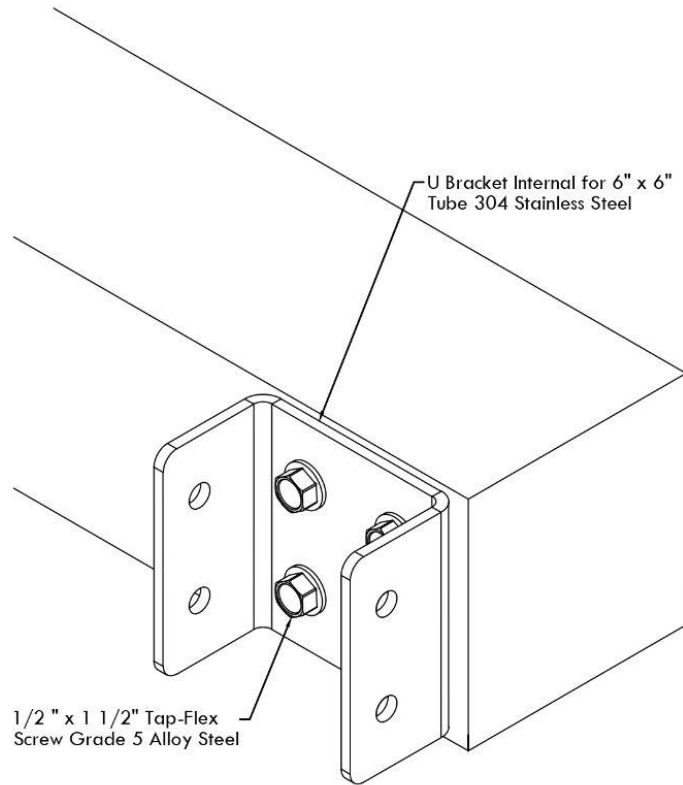
Install internal brackets for the beams at the top of the columns. If the structure includes any integrations such as lighting or wiring for fans or heaters, be sure to make any connections or chase any wires and test the connections.

If the mounting surface is uneven, flat washers or non-shrink grout can be used to shim and level the surface. Wait to install flat washers and nuts to secure the threaded rods.



Install Brackets and Ledger - Attached Structures Only

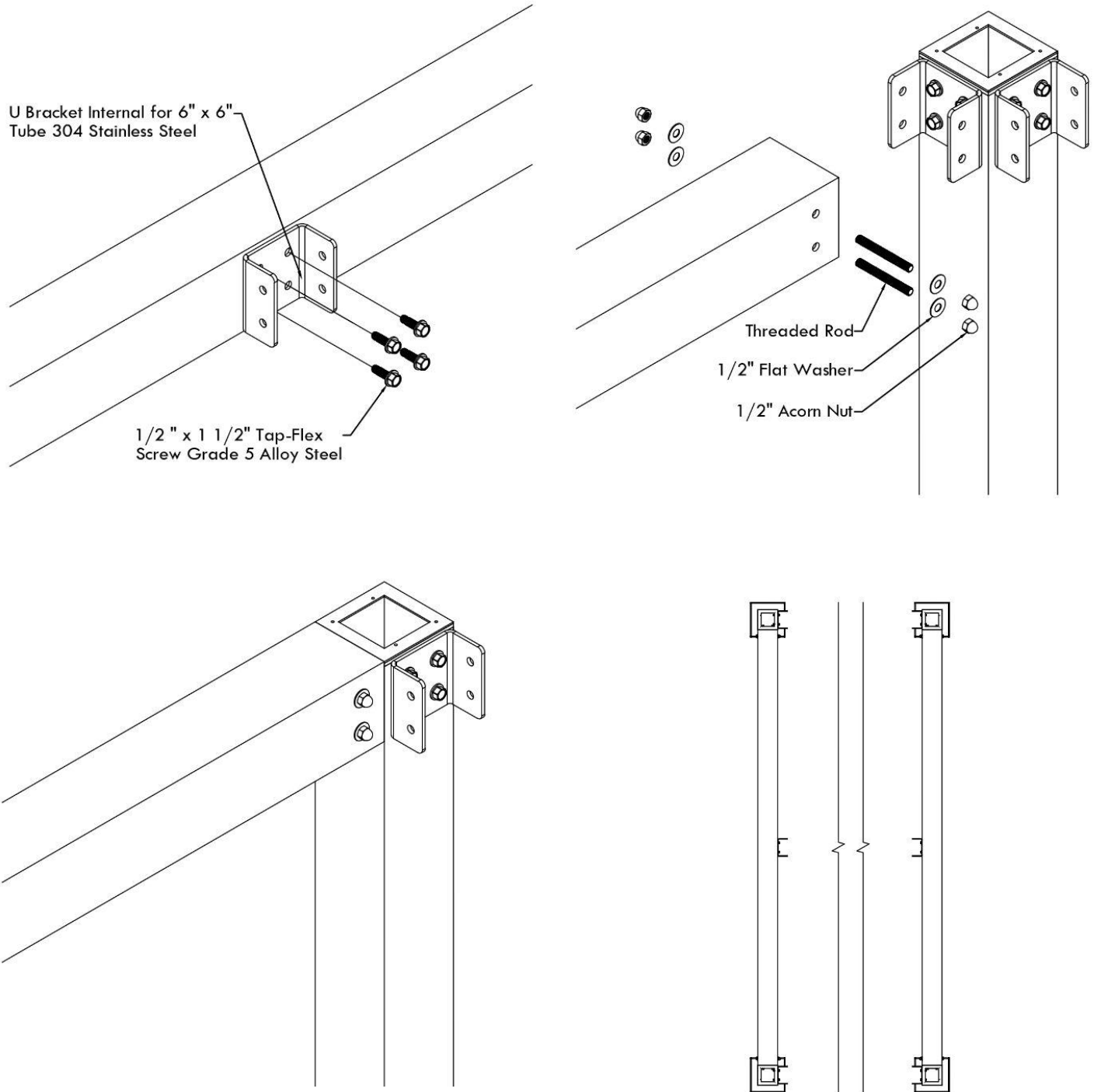
Install the internal brackets for the projection beams to the ledger. Mount the ledger to the host structure. Ensure that the ledger is mounted to structural components that can support the loads of the structure. Hardware for ledger attachment is not provided and will vary depending on mounting conditions.



Install Projection Beams - Freestanding Structures

Install the internal brackets for the center width beam to the projection beams using bolts.

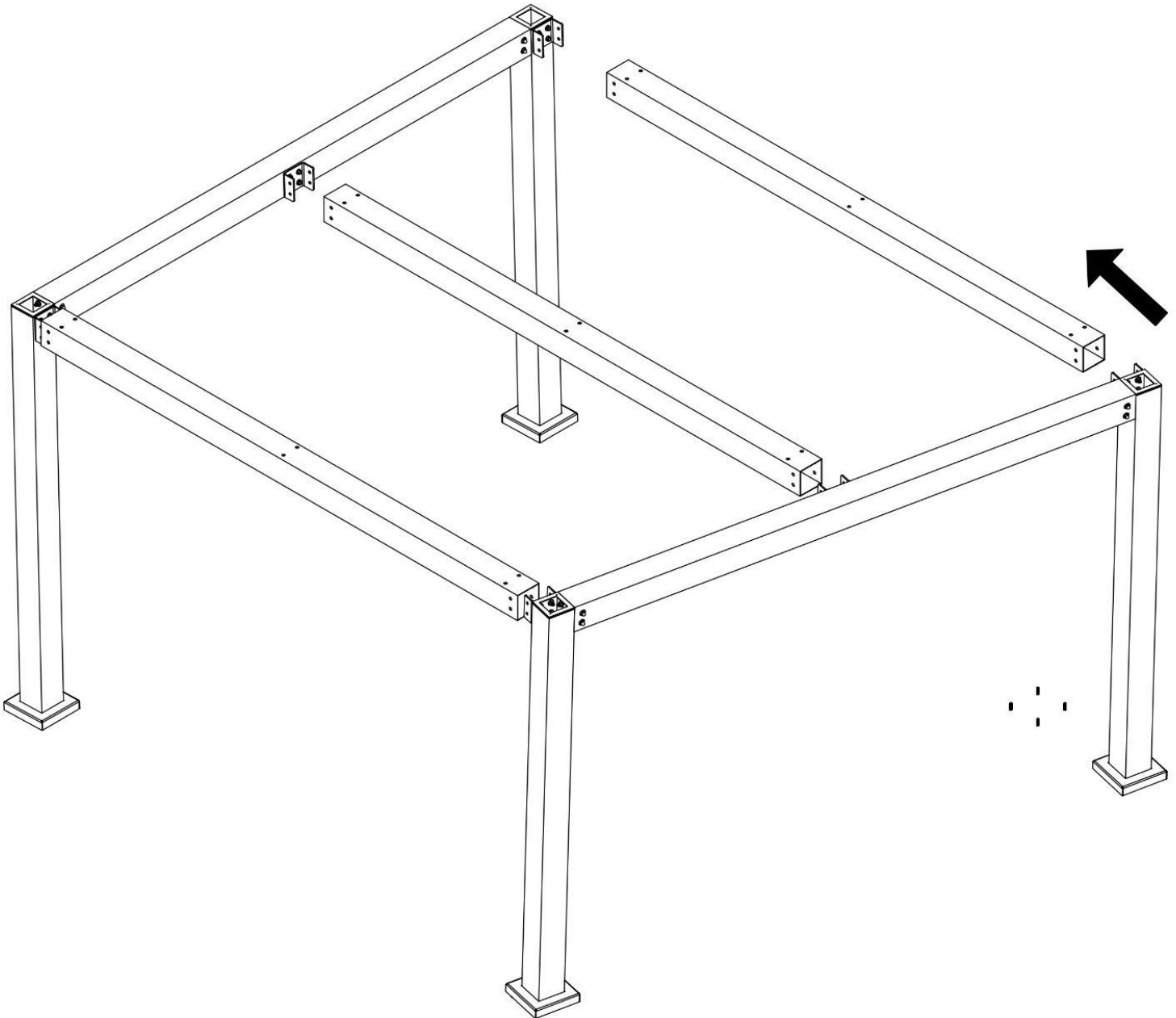
Attach a beam along the projection of the structure to the supporting columns. It will be necessary to lean one of the columns away from the beam in order to slide the internal bracket mounted to the column into the end of the beam. Bolt the beam to the columns and tighten all hardware.



Install Width Beams - Freestanding Structures

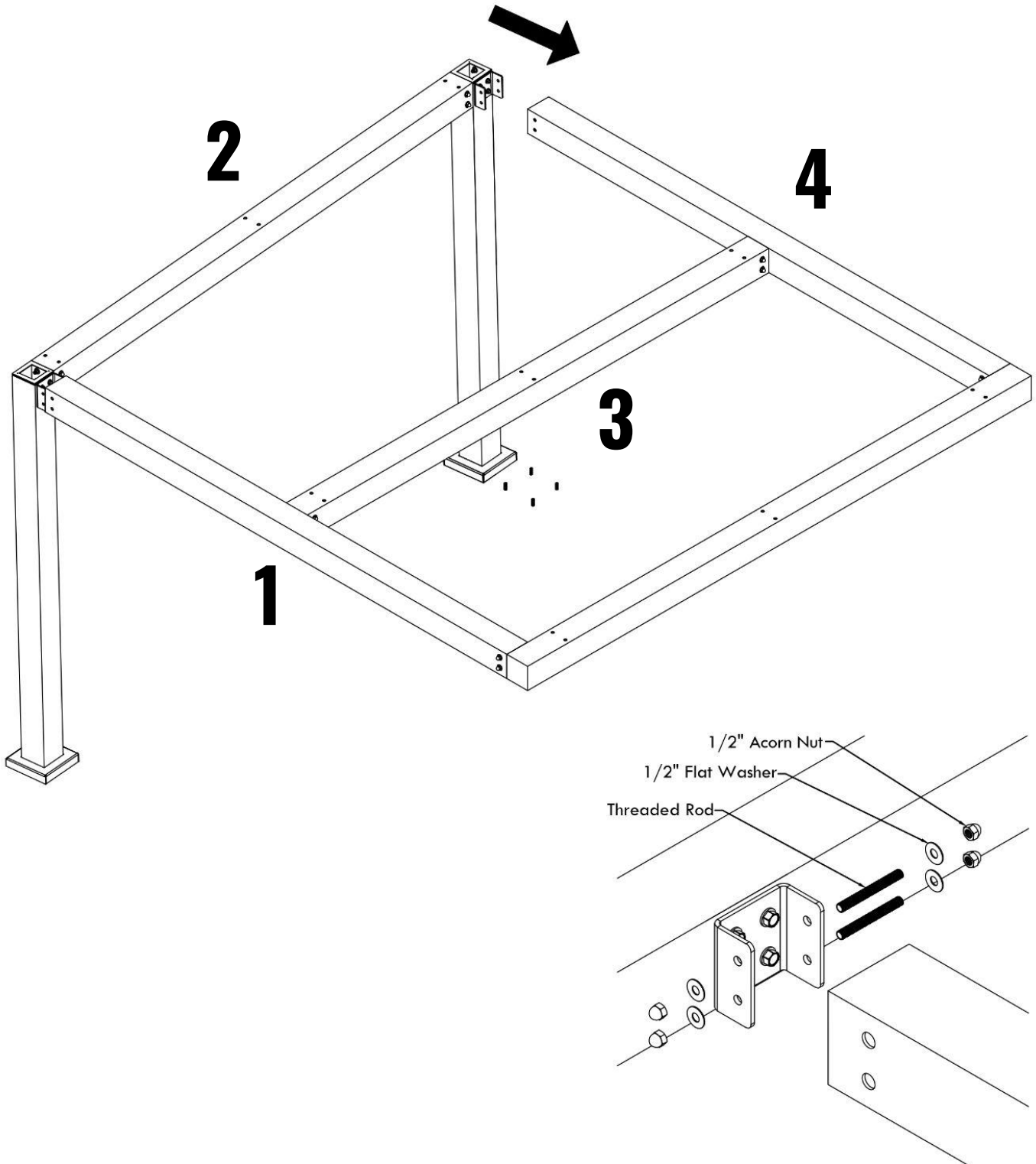
The width beams must be installed in sequence from one side of the structure to the other. All of the components installed in this step will be bolted on one side of the structure while the unbolted ends are gradually slid onto the beam brackets and the projection beam is slowly pulled closer to its final position.

Once the width beams have been placed and bolted to the bracket on one end of the component, install the hardware on the other end of the component and fully tighten all beam connections.



Install Beams - Attached Structures

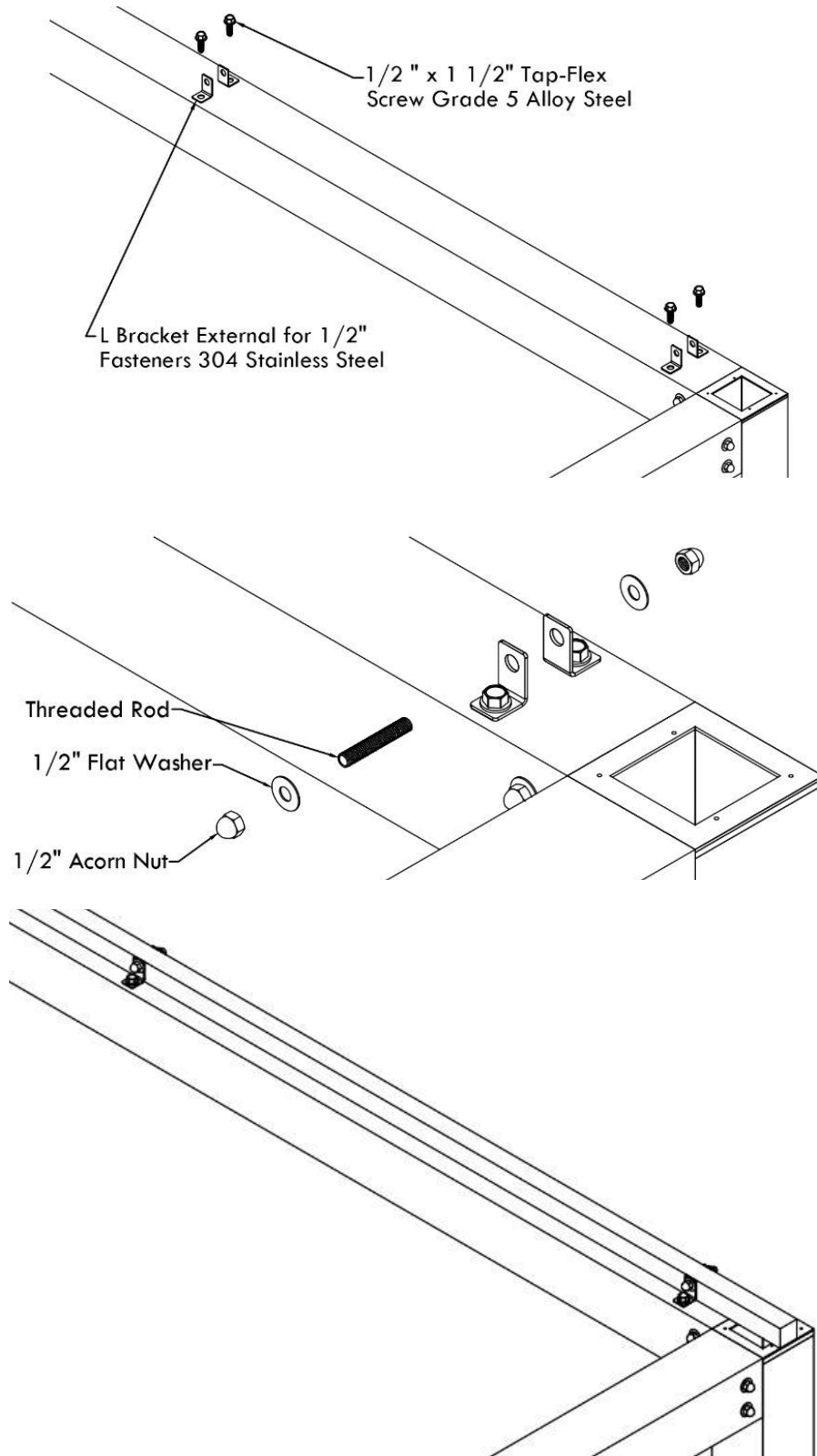
The width and projection beams must be installed in sequence as shown below. Temporary bracing may be required depending on the size of the structure and the number of people performing the installation. All of the components installed in this step will be loosely bolted as they are installed and once all are in position, fully tightened.



Install Roof Supports

Install L brackets on the top of all of the width beams using bolts.

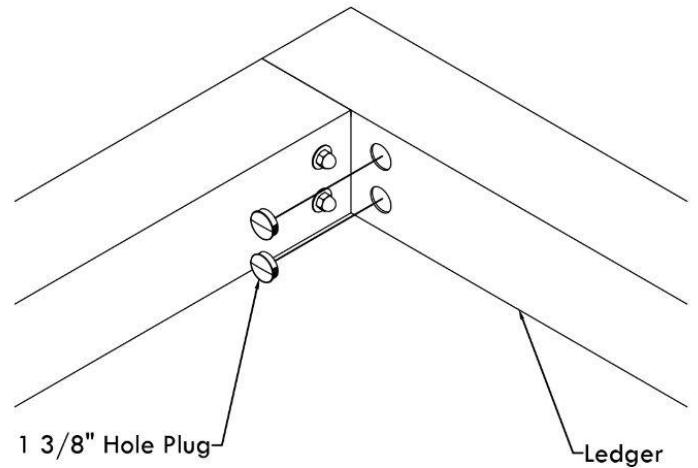
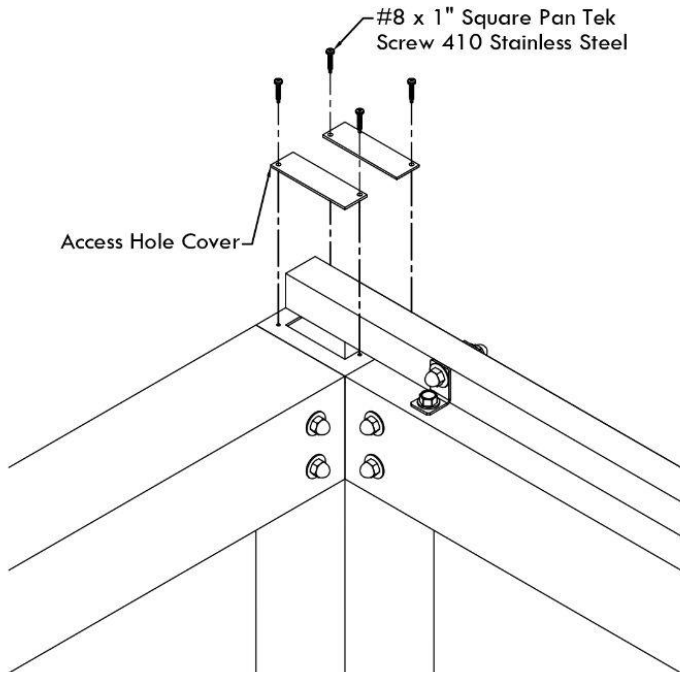
Place the roof supports in between the L brackets on each width beam and secure with hardware. The roof supports vary in height to create the slope of the roof panels. Ensure that the roof supports are installed in the correct sequence for the roof to slope the desired direction.



Install Access Hole Covers & Hole Plugs

Install access hole covers on the tops of the columns using silicone sealant and screws.

Install hole plugs into the face of the ledger, for attached structures.

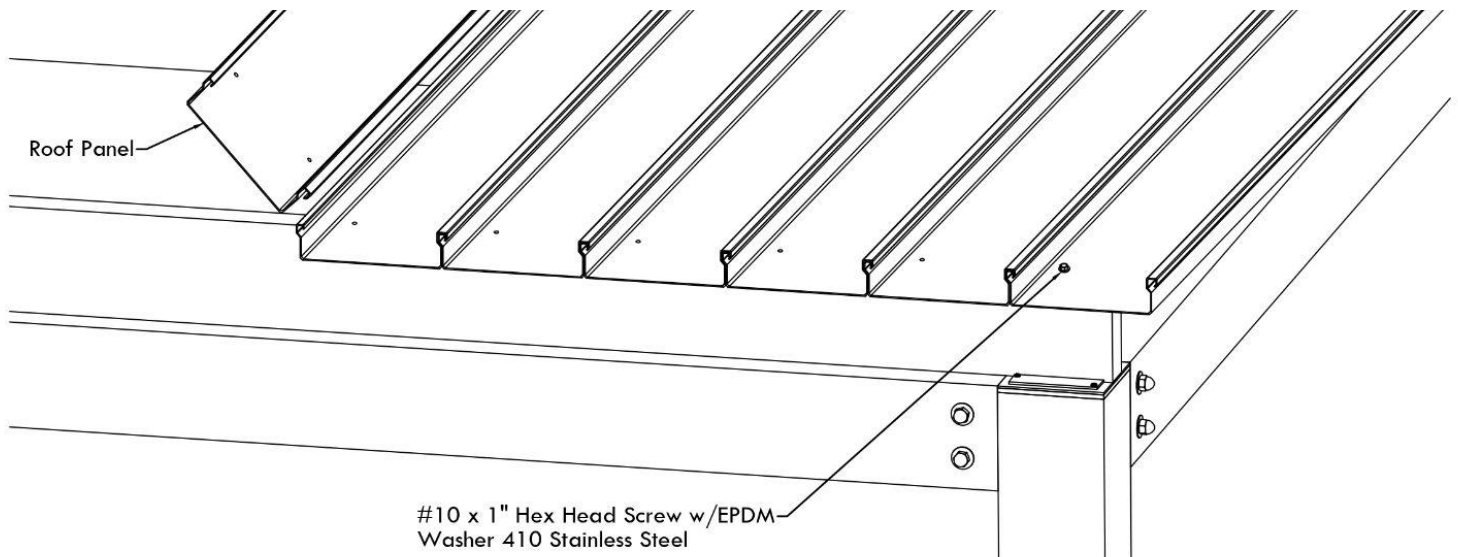


Install Roof Panel and Test Fit

Install the roof panels starting on one side of the structure. Follow the shop drawing to ensure that the first panel is positioned with the correct overhang on the side, front, and back of the structure.

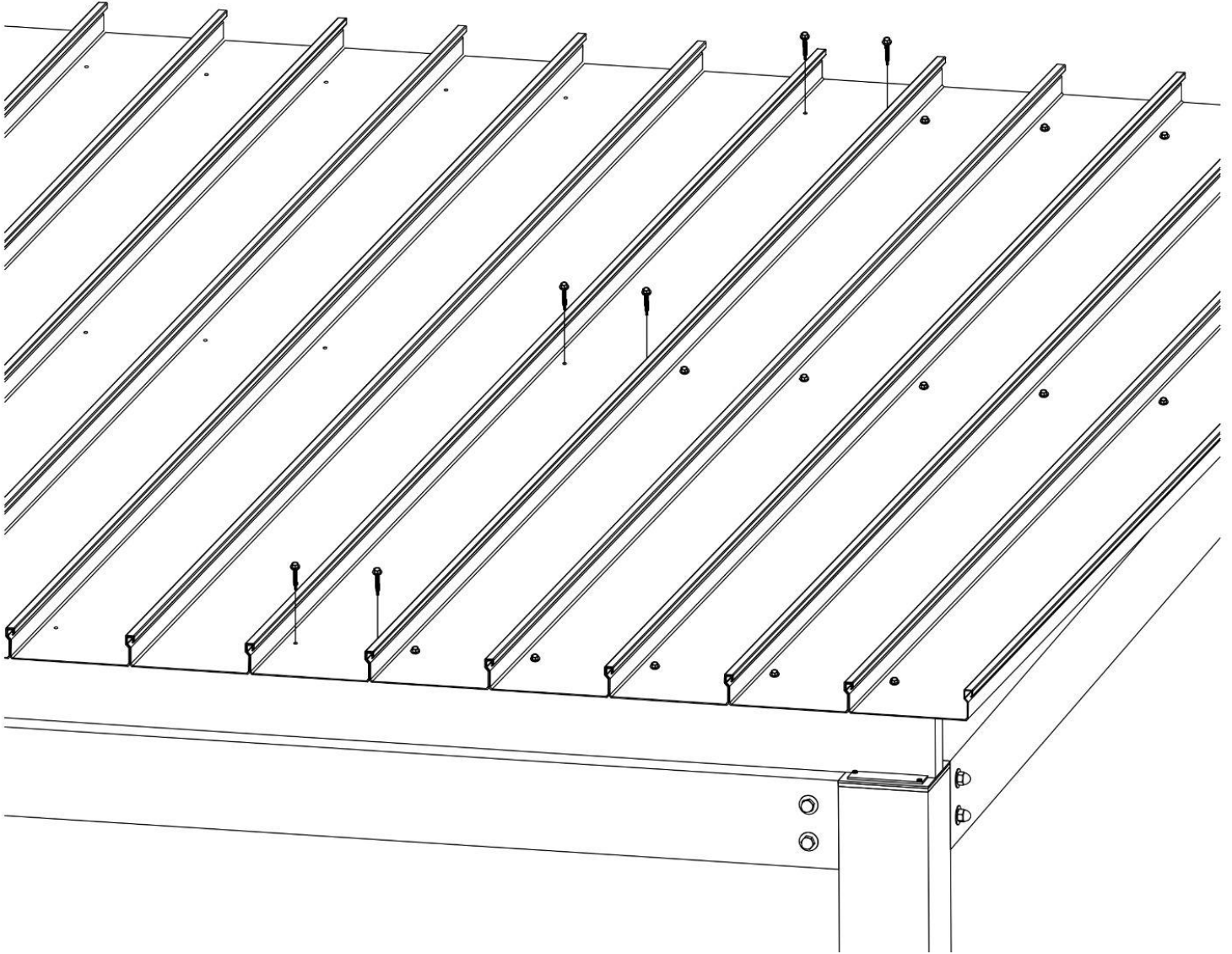
Secure the first roof panel with self tapping screws with EPDM washers. The four holes for attachment to the front and rear roof supports are pre drilled. The holes for the attachment of the roof panel to the center roof support are not pre drilled.

After securing the first roof panel, install the remaining roof panels without securing them. This allows for to confirmation of proper panel alignment and overhang.



Secure Remaining Roof Panels

Once the roof panels are confirmed to be in the correct location, secure with six screws per panel.

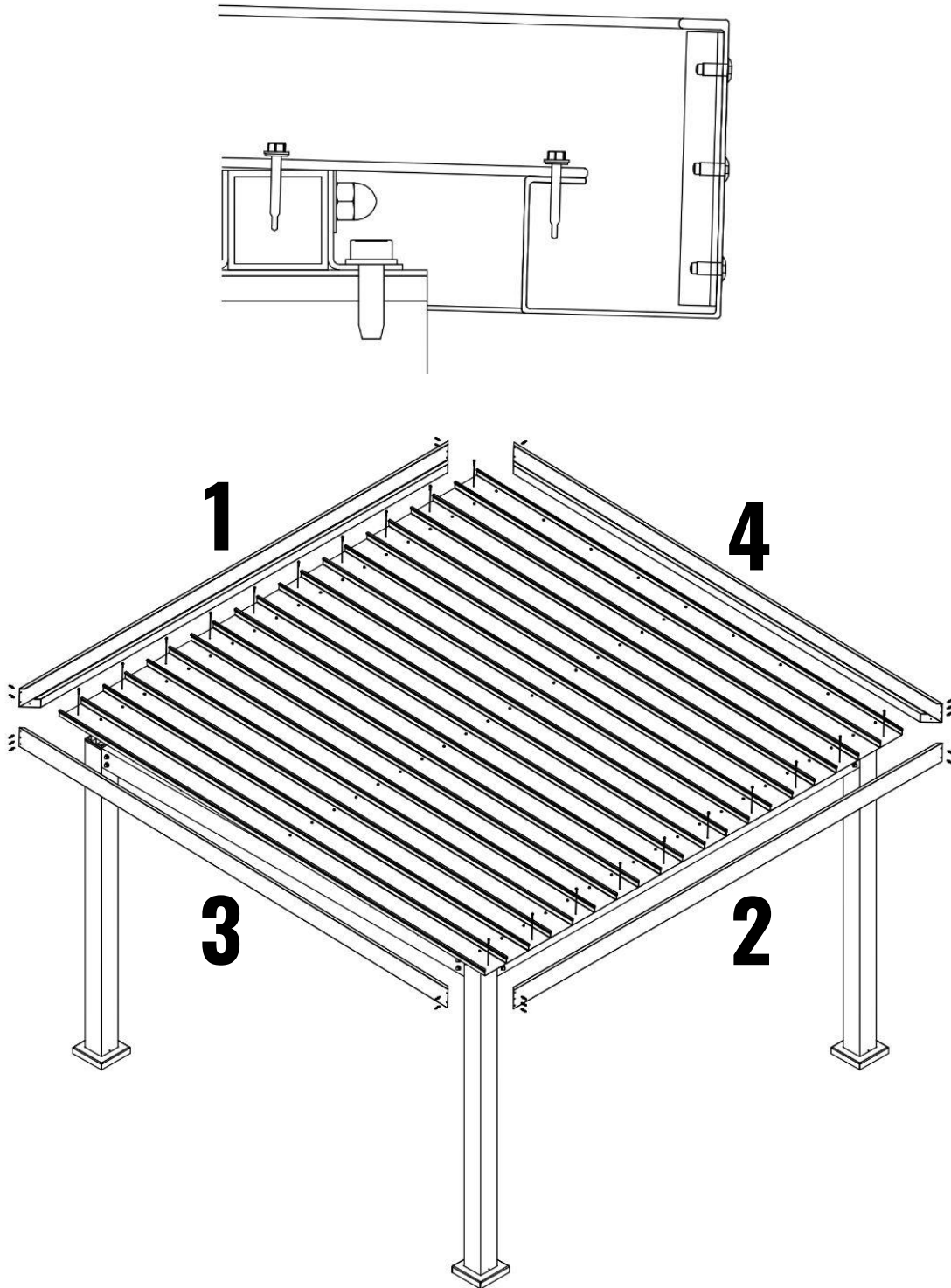


Install Gutters

Starting with the gutter on the high side of the roof panels, center the gutter on the roof panels and secure it with a screw at each end of the gutter and one at the center.

Secure the gutter on the low side of the roof panels in the same way.

Test fit each of the side gutters to ensure that the corners will align properly.

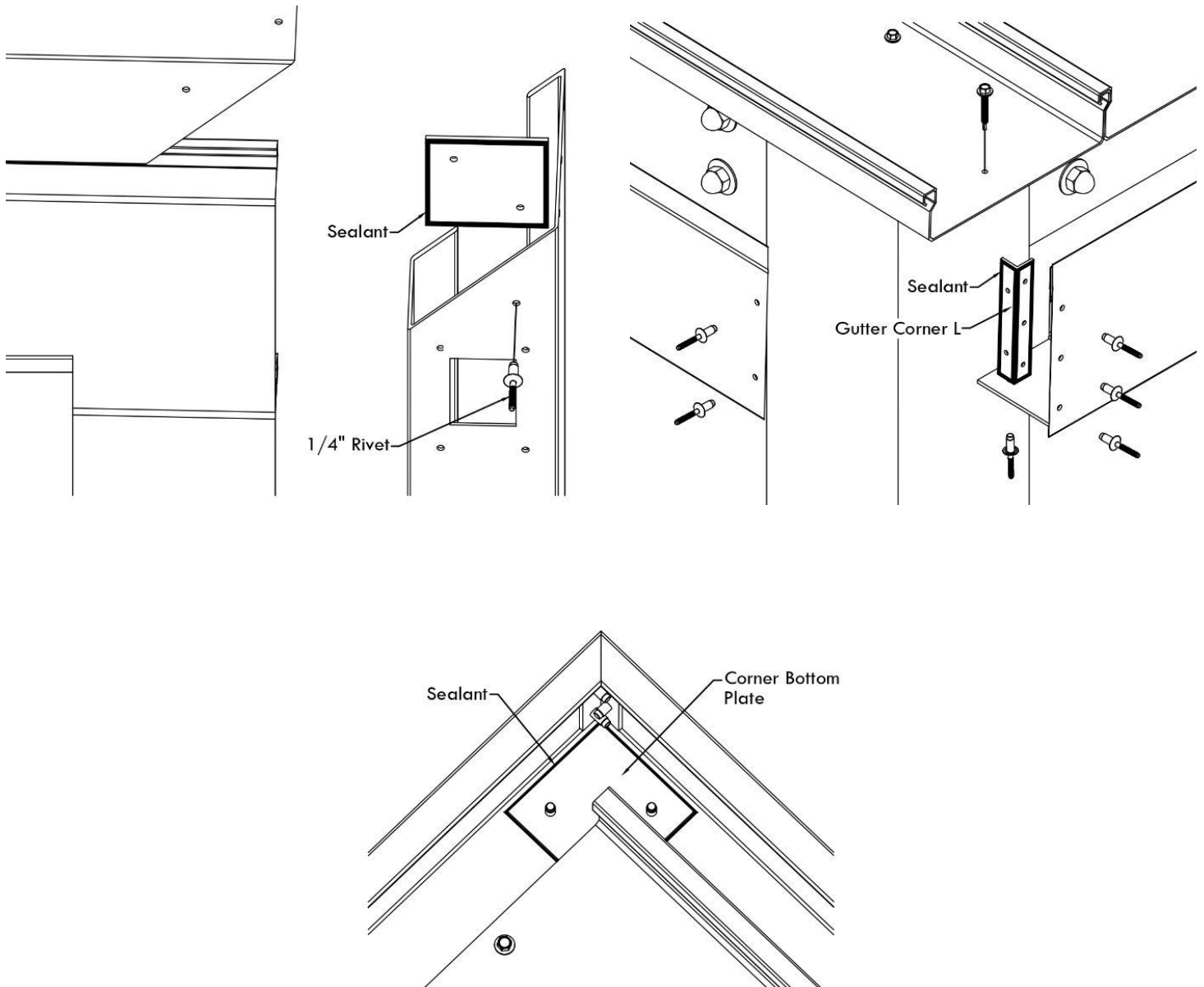


Install Gutters, Continued

Once the placement and fit of all four gutters has been confirmed, fully secure the high side and low side gutters with screws. The gutters should be secured at the center of every other roof panel with one screw. The gutters are not pre drilled.

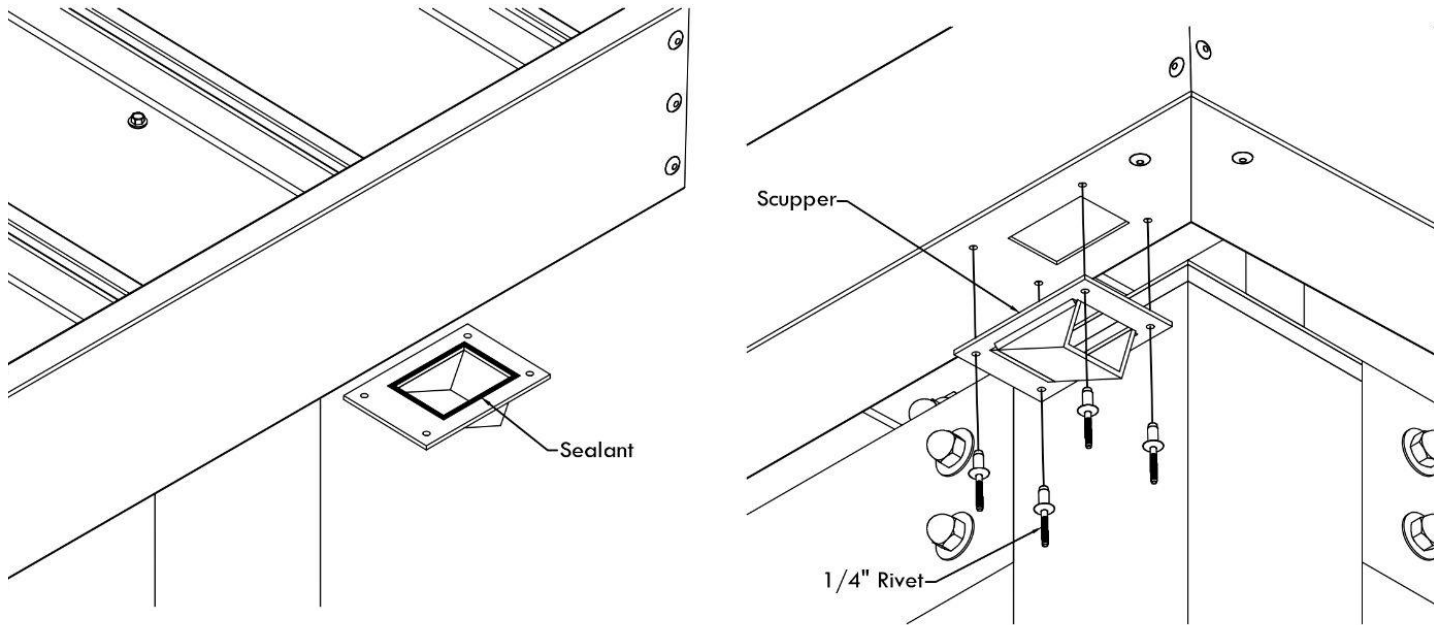
Prepare the ends of both side gutters with sealant, gutter corner Ls, and gutter corner bottom plates. The sealant should be placed on the underside of the joining components. Place each side gutter and secure at the corners with rivets, then with screws through the roof panel 16" on center.

Once all of the gutters are secured, ensure that the corner joints are sealed with gutter sealant along the joints of the gutters and the joining components.



Install Scuppers

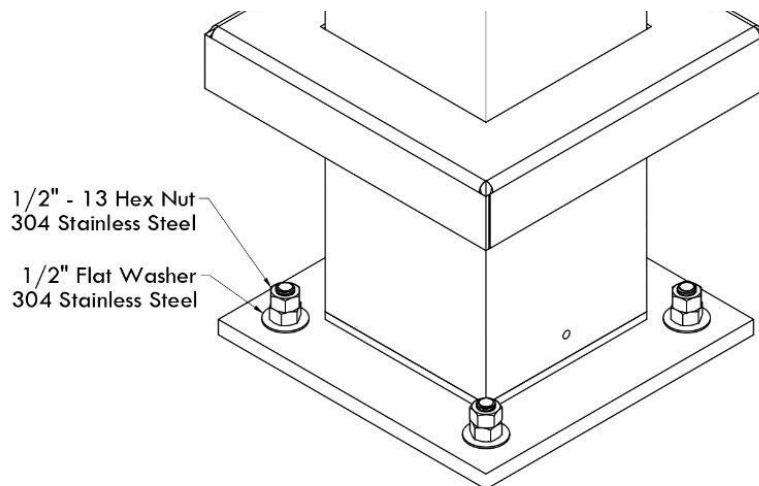
Place sealant around the perimeter of the scupper and secure with rivets to the gutter.



Tighten Column Bolts

Confirm that the beams are installed and bolted, that the beams are level, and that the columns are plumb.

Place flat washers and hex nuts onto the threaded rods at the base of the columns and tighten.



Paint Touch-Up

All structures will require touch up over time and at completion of construction. Use extreme care when handling components. Touch up paint is provided. In the event of scratching or chipping, touch up the painted surface with the included brush. Apply light coats in order to allow the paint to flow and dry with a smooth finish.